

ABSTRACT

The invention is concerned with a three-dimensional protective pad which is constructed from a laminate structure having a first top layer of a neoprene/ nylon skin combination which is stretchable in all directions. There is a second layer of a non-stretchable neoprene adhered under the first layer. Then there is a third layer of a polyurethane foam of a viscoelastic nature adhered under the second layer. Finally, there is a fourth layer of a neoprene/nylon skin combination which is stretchable in all directions adhered under the third layer. This laminated material is now structured into a three-dimensional shape. Therefore, prior to laminating all of the layers, the second and the third layers are adhered to each other first and then a sectional cut is made through layers, the cut surfaces are then closed by cross stitching through the second layer into the third layer and the cut edges are now glued together. The wider the cut and the shape of the cut determine the pitch of the form of the structure and more than one cut determine the curvature of the three dimensional structure.